What is claimed is:

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- 1. A method for introducing nucleic acid into a cell, comprising:
 contacting the cell with a nucleic acid; and
 applying a low electrical field impulse for a long pulse length,
 wherein the impulse is of sufficient duration and strength to
 introduce the nucleic acid into the cell.
- 2. The method of claim 1, wherein the introducing is in vivo.
- 3. The method of claim 1, wherein the introducing is in vitro.
- 4. The method of claim 1, wherein the low electrical field impulse is from about 300-600 volts per centimeter.
- 5. The method of claim 4, wherein the low electrical field impulse is from about 400-500 volts per centimeter.
- 6. The method of doin 1, wherein the electrical impulse is applied over about 10 to 100 milliseconds.
- 7. The method of claim 1, wherein the electrical impulse is applied over about 50 to 75 milliseconds.
- 8. The method of claim 1, wherein the electrical impulse is selected from the group consisting of a square wave pulse, an exponential wave pulse, a unipolar oscillating wave form of limited duration, an a bipolar oscillating wave form of limited duration.
- 9. The method of claim 1, wherein said electrical impulse is comprised of a square wave pulse.
- 10. The method of claim 1, wherein the electrical impulse applied is from about 1 to 10 electrical pulses.
- 11. The method of claim 1, wherein the nucleic acid is supercoiled.

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- 12. The method of claim 1, wherein the nucleic acid is endotoxin-free.
- 13. The method of claim 1, wherein the contacting occurs in the presence of a media for cell growth supplemented with calf serum.
- 14. The method of claim 13, wherein the calf serum is fetal calf serum.
- 15. The method of chim 13, wherein the media is supplemented with 2% fetal calf serum.
- 16. The method of claim 1, wherein said applying occurs at a temperature of about 2 to 10°C.
- 17. The method of claim 1, further comprising incubating the cell at about 37°C.
- 18. The method of claim 17, further comprising incubating the cell in a media containing a member of the group selected from calf serum, fetal calf serum, growth factors, and antibiotics.
- 19. The method of claim 1, wherein the cells are nondividing cells.
- 20. The method of claim 1, wherein the cells are dividing cells.
- 21. The method of claim 1, wherein the cells are hematopoietic cells.
- 22. The method of claim 21, wherein the cells are stromal cells.
- A method for introducing polypeptide into a cell, comprising: contacting the cell with a polypeptide; and

GT\6135666.1 1111111-11111 applying a low electrical field impulse for a long pulse length, wherein the impulse is of sufficient duration and strength to introduce the polypeptide into the cell.

- 24. The method of chim 23, wherein the introducing is *in vivo*.
- 25. The method of claim 23, wherein the introducing is *in vitro*.
- 26. The method of claim 23, wherein the low electrical field impulse is from about 300-600 volls per centimeter.
- 27. The method of claim wherein the electrical impulse is applied over about 10 to 100 milliseconds.
- 28. The method of claim 23, wherein the cells are nondividing cells.
- 29. The method of claim 23, wherein the cells are dividing cells.

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